

MAY, 2023

Trust Matters

The IITB Trust Lab Newsletter



Dear Readers,

It is with great pleasure that we present the inaugural edition of the IITB Trust Lab newsletter.

The Trust Lab at IIT Bombay is a pioneering initiative to foster trust in the digital realm and promote secure and responsible digital practices in India and beyond. Established through the generous contribution of alumnus Dr. Shridhar Shukla (B. Tech, EE, 1983), the lab is a vibrant hub of research, innovation, and learning, bringing together faculty members, students, industry partners, and other stakeholders to address some of the most pressing challenges facing the digital world today.

Through this bi-monthly newsletter, we aim to keep you informed and engaged with the latest developments, research findings, events, and insights emerging from the IITB Trust Lab. Our goal is to provide a platform for exchange and dialogue, as we work together to create a safer, more trustworthy, and more resilient digital ecosystem.

We hope you find this newsletter informative, thoughtprovoking, and enjoyable. We welcome your feedback, suggestions, and contributions, as we embark on this exciting journey towards a more trustworthy digital future. ISSUE 1 MAY, 20<u>23</u>

Newsletter Highlights

Trust Summit 2022

Trust Lab Winter School 2022

Shridhar Shukla Chair in Digital Trust

Capture the Flag Spring, 2023

Trust Lab Grant 2023

Trust Lab Internship Program

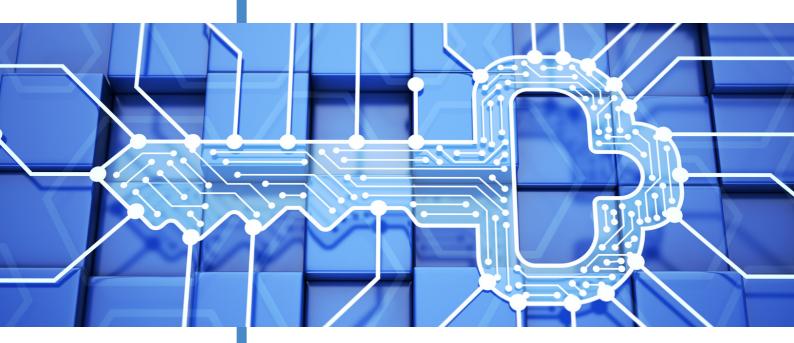
Trust Lab Advisory Board Meeting



IITB Trust Lab

Department of Computer Science and Engineering Indian Institute of Technology Bombay Powai, Mumbai 400076 https://trustlab.space **MAY 2023 | ISSUE 1**

BITS & BYTES Insights from the Trust Lab





SEEDING A DIGITAL COMMUNITY

MUKUL JOSHI (PROGRAM DIRECTOR, IITB TRUST LAB)

Welcome to the inaugural edition of "Trust Matters," the newsletter from IITB Trust Lab where we keep you updated on our work to advance digital trust. As a research lab focused on digital trust, our vision is to lead the effort of making our digital environment trustworthy.

As our world becomes increasingly digital, the importance of digital trust only continues to grow. With an increasing number of our daily activities being conducted digitally, such as healthcare, finance, and transportation, it is crucial that these digital systems are secure, private, and fair. Without trust in the security, privacy, and fairness of these digital systems, people may be hesitant to use them or may be at risk of harm if they do.



This is why it is paramount to further advance research, innovation, and education in the field of digital trust. At our lab, we firmly believe that digital trust can be established through a combination of these three elements. By conducting rigorous research, we can better comprehend the challenges and prospects related to digital trust. Through innovation, we can devise new technologies and approaches to confront these challenges. And through education, we can increase awareness, skills, and create courses to bridge the gap in education, ultimately developing the next generation of trust engineers.

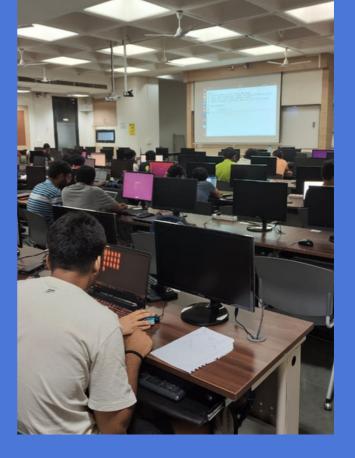
However, our work cannot be done in isolation. Collaboration with industry partners, government agencies, other research labs, and our patrons is crucial to advancing digital trust globally. This enables us to leverage the expertise, insights, and resources of our partners to accelerate our progress in making the digital environment more trustworthy. We are proud to work with a wide range of partners and look forward to continuing these collaborations in the coming years.

We appreciate your interest in our work, and are excited to share more updates with you in the future.

<u>Mukul</u> is a seasoned entrepreneur with over 2 decades of experience in software R&D and product engineering. He brings a wealth of knowledge and expertise to the Trust Lab team.

AT TRUST LAB,
WE FIRMLY
BELIEVE THAT
DIGITAL TRUST
CAN BE
ESTABLISHED
THROUGH A
COMBINATION
OF THREE
ELEMENTS—
RESERACH,
INNOVATION
AND
FDUCATION.

Join us today in our pursuit of a trustworthy digital future!



Join Trust Lab in its mission to strengthen the digital community! Trust Lab is looking to collaborate with individuals from diverse backgrounds, professions, and sectors who share our commitment to digital trust. Together, we can create a trustworthy digital environment through research, resource development, education, awareness activities, and exchange of ideas and knowledge.

As a researcher, you can take advantage of our resources to build cutting-edge research programs that transcend traditional boundaries. If you're an educational institution, we can help you develop and implement a framework for digital trust education, research, and collaboration at IIT Bombay and across the country. Students can participate in internships, contests, and events, and industry and government employees can propose joint research projects. For industry professionals and government employees, you can contribute to our mission by proposing joint research projects, providing expert consulting, inputting policy efforts, standardizing processes, developing state-ofthe-art FOSS resources, translating theoretical research into practical applications, and more.

No matter who you are or where you work, if you have a passion for digital trust and ideas to share, we want to hear from you. Our upcoming events include a national-level Capture the Flag contest for students, Trust Summit 2023, and several student outreach events. Don't miss out on the opportunity to collaborate with us on these events and join us today in our pursuit of a trustworthy digital future! Fill out the form below and let's work together to create a safer and more secure digital community for all.

Sign Up







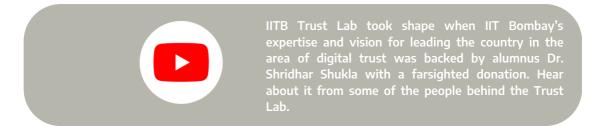
THE TRUST LAB STORY



The 'IIT Bombay Trust Lab' was established on September 15, 2022, with the primary objective of enhancing India's digital ecosystem and promoting trust in the digital realm while contributing towards a secure and responsible Digital India. It is housed in the Department of Computer Science and Engineering at IIT Bombay.

Trust Lab aims to achieve its goals through several objectives, such as attracting and nurturing exceptional researchers, developing and implementing educational and research frameworks for Digital Trust, and collaborating with industry and government to advance the practice of digital trust through joint research projects, expert consulting, policy inputs, and standardization efforts. Additionally, the lab focuses on facilitating the translation of theoretical and academic research into practical applications, developing Free and Open Source Software (FOSS) resources, and promoting diverse areas of digital trust research, including blockchains, cryptography, cybersecurity, formal methods, game theory, and trustworthy AI/ML.

Led by a team of faculty consisting of Prof. Manoj Prabhakaran, who serves as the Principal Investigator, and Prof. G Sivakumar and Prof. Umesh Bellur in the role of Co-PI, Trust Lab is contributing to Digital Trust on three fronts: Science (research-related activities), Technology (development-related activities), and Ecosystem building which includes educational, outreach and entrepreneurship-related activities.





REWIND: OUR WINS AND MILESTONES



Although launched a little over six months ago in September 2022, Trust Lab has made significant strides in this brief period. With over 22 distinguished faculty members providing mentorship to more than 30 students, Trust Lab is conducting research and development activities across science, technology, research ecosystem development, focusing on meeting the needs of industry, society, and student research goals. Some of the notable achievements include the Winter School, a Chair Professorship, Fellowships, Internships, outreach activities, competitions, and colloquia and conversations.

We hope that our accomplishments will inspire you to contribute to the Trust Lab's mission, and make our journey more eventful through your unique contributions.

TRUST LAB SUMMIT

Trust Summit is IITB Trust Lab's flagship annual event. It showcases the latest and the best digital trust initiatives in India, and highlights some of the most critical issues. Along with sessions that are open to all participants, the Trust Summit also features exclusive sessions for experts to discuss specific topics in depth.







TRUST LAB SUMMIT 2022

The first edition of the Trust Summit on September 2022 served as a platform for launching the Trust Lab and was marked by a special ceremony held on the campus.



The keynote address titled "Cryptography and Society's Demand for Privacy" was presented via video link by Prof. Tal Rabin, the Rachleff Family Professor of Computer Science at the University of Pennsylvania. This was followed by two panel discussions. The first panel discussion, "The Digital Trust Ecosystem in India," was moderated by Prof. G. Sivakumar, a Professor in the Department of Computer Science and Engineering at IIT Bombay and Co-Principal Investigator of Trust Lab. The panelists included Mr. Nandkumar Saravade, Mr. Sameer Ratolikar, and Ms. Rama Vedashree. The second panel, moderated by Prof. Umesh Bellur, a Professor in the Department of Computer Science and Engineering at IIT Bombay and Co-Principal Investigator of Trust Lab, focused on "Technology Challenges in Digital Trust" and featured Mr. Dilip Asbe, Mr. Sanjay Jain, and Prof. Sandeep Shukla as panelists.

The Summit also featured the unveiling of the logo and website for the 'IIT Bombay Trust Lab' and hosted two panel discussions on the digital trust ecosystem in India and the technology challenges faced in digital trust. The event was dynamic and engaging, showcasing the Trust Lab's commitment to advancing research, innovation, and collaboration in the field of digital trust.





SHRIDHAR SHUKLA CHAIR IN DIGITAL TRUST

Prof. Vinay J. Ribeiro was awarded the first Shridhar Shukla Chair in Digital Trust at IIT Bombay. The Chair Professorship will further IITB Trust Lab's vision of establishing IIT Bombay as a world leader in digital trust through excellence in research. Prof. Vinay J. Ribeiro was felicitated on Feb 13, 2023 in the virtual presence of IITB Trust Lab's founding donor Dr. Shridhar Shukla (B. Tech, EE, 1983) and Dean ACR Prof. Ravindra D. Gudi. Among those present physically at the felicitation ceremony several faculty members associated with the Lab — Prof. Manoj M. Prabhakaran, Prof. Varsha Apte, Prof. G. Sivakumar, Prof. Kameswari Chebrolu, Prof. Umesh Bellur and Mr. Mukul Joshi (Program Director, Trust Lab).

Once again, congratulations to Prof. Ribeiro on this well-deserved achievement, and we wish him all the best in his future endeavors in the field of digital trust.



PROF. VINAY J. RIBEIRO

Prof. Ribeiro's extensive research experience in the area of loT, wireless networks, and indoor positioning and navigation will undoubtedly contribute significantly to the growth of digital trust research. His contributions to this area will have a lasting impact on the field and pave the way for future researchers.







Winter School Photos

Did you get snapped at our Winter School? Check out the photos below and also our social media to see if you were snapped!







TRUST LAB WINTER SCHOOL 2022

In December 2022, IITB Trust Lab and ACM India collaborated to host a Winter School for undergraduate and postgraduate students, with the goal of raising awareness about various topics related to Digital Trust. The school provided a solid foundation in Digital Trust, addressed current research challenges and opportunities, and explored emerging trends in the field. The program prioritized hands-on learning, including lab assignments and case studies, to help students gain practical experience and apply their knowledge. Through the winter school, students had a unique opportunity to interact with experts, exchange ideas, and gain a deeper understanding of the crucial role of Digital Trust in today's rapidly evolving digital landscape.

We are now planning a summer school. Please stay tuned to our website for more updates on this.

Follow/Like us on Social Media



trustlab@cse.iitb.ac.in













CTF Photos

Did you get snapped at our CTF? Check out the photos below and also our social media to see if you were snapped!









On the evening of April 1st, the IITB Trust Lab hosted a CTF contest in SLO2, a lab of the Computer Science Department. The competition comprised 5 challenges, with a total of 1500 possible points, and lasted for 6 hours (starting from 6 pm onwards). The event attracted more than 50 teams and 84 registered users, reflecting a keen interest in the field of information security and ethical hacking among IIT Bombay students.

On April 3rd, the top five winning teams were announced, and it was remarkable that the winning team achieved a perfect score. The exceptional performance of all the teams demonstrated a high level of competence among the contestants. At the Trust Lab's first Advisory Board Meeting on April 8, 2023, Ms. Rama Vedashree, former CEO of Data Security Council of India, and Mr. Sanjay Jain, Chief Innovation Officer at CIIE, awarded certificates to the top five winning teams. The winners were also recognized for their outstanding achievement with cash prizes.

Expanding the scope of the Trust Lab's CTF contest beyond IIT Bombay and making it a national event would be an excellent way to promote awareness and interest in the field of cybersecurity and digital trust. The Trust Lab plans to leverage the assistance of the winners of the first edition of the CTF to organize the next edition of the contest.





First Advisory Committee Meeting

An Advisory Board comprising experts from diverse fields, including industry, academia, and government, has been established to offer strategic guidance for the Trust Lab's operation. The Board will convene, at least, biannually to review progress and provide constructive feedback.



Dr. Dan Boneh is a Professor of Computer Science at Stanford University where he heads the applied cryptography group and co-directs the Computer Security Lab.



Ms. Rama Vedashree is a former CEO of Data Security Council of India. Prior to moving to DSCI she was Vice President, NASSCOM leading all initiatives in Domestic IT, eGovernance and Smart Cities among others.



Mr. Sanjay Jain is a partner at the Bharat Innovation Fund, which invests in early stage companies that use Intellectual Property as a business differentiator. Sanjay is also the Chief Innovation Officer at CIIE.Co,

The first Advisory Board Meeting of IITB Trust Lab took place on April 8. At the conclusion of the lively bi-annual review meeting, Advisory Board members Ms. Rama Vedashree (former CEO, Data Security Council of India) and Mr. Sanjay Jain (Chief Innovation Officer at CIIE) handed out certificates to the top-five winning teams of the Capture the Flag Contest. Advisory Member Prof. Dan Boneh, who is a Professor of Computer Science at Stanford University, connected separately with the Trust Lab team through a virtual meeting on April 9.



Trust Net

TrustNet is envisioned as a network of partners who share the vision of IITB Trust Lab for enabling a trustworthy digital environment. TrustNet will focus on creating and deploying pedagogical and practical resources at various levels, and organising activities. Apart from IIT Bombay, the network will include a select set of universities and research institutions, along with relevant industry and government partners.

COLLOQUIA AND CONVERSATIONS

Trust Lab colloquium series features researchers and practitioners from around the world presenting state-of-the-art developments in a range of topics in Digital Trust. Trust Lab also organises conversations among experts on topics related policy, education, ecosystem development.





Trust Lab Internship 2023

The IITB Trust Lab is offering a 9-month internship program from May to December 2023 for undergraduate and postgraduate students from all over India interested in the domain of digital trust. The program involves a unique format of virtual and onsite work, with interns spending two months in the beginning and one month at the end on the IIT Bombay campus and working remotely from their respective institutes in the intervening period. There are ten internship projects available, each advised by a different faculty member associated with the Trust Lab.

Project - Secure Remote Programming for Edge **AI Microcontrollers Description** Advised by: Prof. Udayan Ganguly

Project - AI for Cybersecurity Advised by: Prof. Manjesh Kumar Hanawal

Project – eBPF for Blocking malicious process Advised by: Prof. Manjesh Kumar Hanawal

Project - Networks and Auction Design Advised by: Prof. Swaprava Nath

Project - Privacy in a Blockchain Advised by: Prof. RK Shyamasundar Project – Analyse Fairness in various Blockchain **Platforms** Advised by: Prof. RK Shyamasundar

Project – Hierarchical FEDERAted Learning for the INdian healthcare SYSTem (HI-FEDERAL-**INSYST)**

Advised by: Prof. Ganesh Ramakrishnan

Project –PULSE: Practical and Upbeat Labs for **Security Education** Advised by: Prof. Kameswari Chebrolu

Project – Design and development of Smart Contract applications for Algorand Blockchain Advised by: Prof. Vinay Ribeiro

Project – Understanding the limits of Information-Theoretically Secure Multi-Party Computation Advised by: Prof . Manoj Prabhakaran











Current Research Projects



Trust Lab currently has over 20 eminent faculty members guiding and mentoring doctoral, masters and undergraduate students, on a variety of aspects of Digital Trust.

Trust Lab Grant Winners 2023

The response to the CFP for Trust Lab Grant 2023, which seeks to support innovations and research in various areas related to Digital Trust, has been overwhelming among departments at IIT Bombay. The grant, which will fund relatively short-term proposals in research, teaching, or resource development activities, is the first step towards creating a platform for exchanging ideas and knowledge in the broad field of digital trust.

The grant focuses on innovations/research in various areas related to Digital Trust, including but not limited to Systems Security, Theory and Applications of Cryptography, Privacy, Formal Verification for Security, Emerging Applications (including IoT, Blockchains, DeFi, Digital Identity), Quantum Cryptography, Trustworthy AI and Adversarial Machine Learning, Trust in HCI - Policy for Digital Trust, and Education and Awareness about Digital Trust. Proposals that synergistically combine expertise from multiple domains were selected.

Here are our winners listed alphabetically. Our heartiest congratulations to the grant winners!



Lite Bytes

Trust Lab organizes bi-weekly lunch meets for associated students and faculty members.

Program Director Mr. Mukul Joshi visited IITB Gandhinagar, Gandhinagar Institute of Technology and Nirma University in April as part of Trust Net's outreach program.

Trust Lab Connect (TLC), a mailing list by IITB Trust Lab went live on March 20, 2023.

Trust Lab participated in the CSE Research Symposium 2023 on March 25-26.

Trust Lab procured its first pair of high-end servers in April , 2023.







Prof. Abir De



of Training Instances Prof. Abir De & Swaprava Nath

Prof. Abir is an Assistant Professor at the Department of Computer Science and Engineering in IIT Bombay since January 2020. He spent two years in Germany as a post-doc at MPI-SWS. He finished his Ph.D. in 2018 from IIT Kharagpur and BTech and MTech from IIT Kharagpur in 2011. His research interests lie in learning with graphs and sets which include designing neural gadgets which would learn regularities from data to solve those problems which are extremely hard to solve in worst case, data subset selection, designing privacy preserving learning algorithms on social networks. He was awarded INAE Young Engg. and Prof. Krithi Ramamritham award in 2021. During his PhD, he was also awarded Google India Ph.D. fellowship.

<u>Adversarial Machine Learning Under Perturbation of a Subset</u>

Prof. Swaprava is currently an Assistant Professor at the Department of Computer Science and Engineering in IIT Bombay. Prior to this, he worked as a faculty member at the Department of Computer Science and Engineering in IIT Kanpur. He has also held postdoctoral positions at Indian Statistical Institute, New Delhi, and Carnegie Mellon University. He completed his PhD from the Department of Computer Science and Automation at IISc Bangalore.

His research focuses on the intersection of economics and computation, with numerous applications in social and industrial paradigms. His work has been published in top conferences in artificial intelligence and multiagent systems, such as AAAI, IJCAI, AAMAS, and WINE, as well as in economics and management venues, including Games and Economic Behavior, Economics Letters, and Management Science.

In addition to his academic positions, Swaprava has industry experience, having worked at Xerox Research Centre Europe and Cisco Systems India. He has received several awards and grants for his work, including the Fulbright-Nehru postdoctoral grant, Tata Consultancy Services PhD Fellowship, and the Honorable Mention Award of Yahoo! Key Scientific Challenges Program.



Prof. Swaprava Nath





Prof. Ankur Kulkarni



Game Theoretic Studies of Trust for Multiagent Systems

Prof. Ankur is an Associate Professor at the Indian Institute of Technology Bombay (IITB). His research interests lie in decision making in distributed, decentralised and strategic environments, using tools of artificial intelligence, stochastic processes, game theory, mathematical optimization, and information theory. His current focus is on informational issues in decision making such as stealth, security, privacy, elicitation and signaling. He has published 30 papers in international journals and more than 30 papers in international conferences. He has been a consultant to the Securities and Exchange Board of India wherein he was solely responsible for suggesting regulatory interventions for high frequency algorithmic trading. He presently serves on the IT-Project Advisory Board of SEBI and is responsible for advising SEBI on utilizing advanced technologies such as AI/ML and data analytics and guiding datarelated policies for internal use and public use. He is also an advisor to the Tata Consultancy Services and on the technical advisory committee of Maha-IT, a Govt of Maharashtra enterprise. He was previously a consultant to HDFC Life Insurance Company wherein he tackled the problem of design of incentives for sales agents. He is presently advising Kotak Mahindra Bank Limited on antimoney laundering and anomaly detection, and Bank of Baroda on smart cash management. He received his B.Tech. from IITB in 2006, followed by M.S. in 2008 and Ph.D. in 2010, both from the University of Illinois at Urbana-Champaign (UIUC).



Prof. Anupam Guha



Trust and Public AI: A Policy Analysis

Prof. Anupam is an Assistant Professor at the Ashank Desai Centre for Policy Studies at IIT Bombay. His research primarily focuses on artificial intelligence (AI), AI policy, and the intersection of AI and labor. He holds a PhD in computer science from the University of Maryland, which he received in 2017. His dissertation work focused on developing multimodal language and vision AI systems.

Before joining academia, Anupam worked as an AI researcher in the industry from 2017 to 2019, focusing on natural language processing (NLP) systems. His current work in AI policy is informed by his technical understanding of AI and its relationship with labor and capital. He seeks to expand the critical lens on Al from the current instrumental and normative frameworks to one informed by an immanent critique of the political economy of techno-social systems.

Efficient automated Synthesis of Heart Pacemaker from Logical Specifications

Prof. Ashutosh Gupta and Prof. Krishna S.

Prof. Ashutosh is a faculty member in the department of computer science and engineering at IIT Bombay since early 2018. He received a Ph.D. in computer science from TUM in 2011 and was affiliated with TUM, MPI-SWS, and EPFL at different times during his Ph.D. Between his Ph.D. and current position, he held a faculty position at TIFR, Mumbai and worked as a postdoctoral researcher in the Henzinger group at IST Austria.



Prof. Ashutosh Gupta





Prof. Krishna S.



Prof. Krishna is a professor in the department of computer science and engineering at IIT Bombay, where she is part of the formal methods research group. Prior to joining IITB, she graduated from IIT Madras with a Ph.D. in theoretical computer science. Over the years, she has been serving regularly on the program and steering committees of several premier conferences in formal methods. Some of her recent work has been recognized in the form of national and international doctoral dissertation awards won by her Ph.D. students such as an honorable mention at the ACM India doctoral dissertation award, as well as the Beth dissertation prize.



Biswabandan Panda

Friend or Foe: Belady Pursuers and Randomized **Secure Last-level Caches**

Prof. Biswabandan is an Assistant Professor at the CSE dept. of IIT Bombay. Prior to that, he was an Assistant Professor at IIT Kanpur. Prior to that, he was at INRIA, Rennes, working with André Seznec, for his postdoc. He received his Ph.D. and Masters from the Indian Institute of Technology Madras. He is one of the recipients of Qualcomm Faculty Award 2022.





<u>Container Honeypots: Collecting Threat Intelligence</u> to Testing Software Vulnerabilities

Prof. Manjesh received the B Tech degree in ECE from NIT, Bhopal, in 2004, the M.S. degree in ECE from the Indian Institute of Science, Bangalore, India, in 2009, and the Ph.D. degree from INRIA, Sophia Antipolis and University of Avignon, France, in 2013. After two years of postdoc at Boston University, he joined Industrial Engineering and Operations Research at the Indian Institute of Technology Bombay, Mumbai, India, where he is an Associate Professor now. During 2004-2007 he was with CAIR, DRDO, working on various security-related projects. His research interests include communication networks, machine learning, and cybersecurity. He is a recipient of Inspire Faculty Award from DST and the Early Career Research Award from SERB. He has received several research grants like MATRIX from SERB and Indo-French Collaborative Scientific Research Programme from CEFIPRA.



Prof. Manjesh Hanewal





Prof. Siddhartha Santra

Security Structure of Quantum Networks: Quantum-Safe and Quantum-resistant Regions

Prof. Siddhartha is an Assistant Professor in Department of Physics and is also associated with the Center of Excellence in Quantum Information. Computation, Science and Technology (CoE-QUICST) at IITB. He obtained his PhD in 2014 from the University of Southern California, Los Angeles for work in quantum information theory. Subsequently, he was a postdoctoral fellow at the US Army research Laboratory from 2014-2021 and for a year at Stanford from 2015-2016 working on quantum networking. He is currently working on the design of large-scale quantum networks for distributed quantum information processing.





Prof. Shishir K. Iha



Data Brokering Practices and Data Trustworthiness: A Policy Evaluation

Prof. Shishir is the former Head, Ashank Desai Center for Policy Studies at IIT Bombay. He holds a dual Masters degree in Business Administration and International Relations and a PhD in Political Science from Syracuse University. He has over twenty-five years of teaching experience at different institutions, including IIT Bombay and Ithaca College, New York. He has taught as a visiting faculty at IIM Bangalore and IIM Kozhikode. He is actively engaged in analyzing and theorizing various aspects of the digital economy, particularly the policy relevant issues. He was the National Lead for the launch of the Creative Commons India Chapter in 2007.

Software Design for a Rich, Robust and Configurable Access **Control in Complex Multi-User Networked Applications**

Prof. Varsha is from the Department of Computer Science and Engineering at IIT Bombay. She completed her M.Sc. from Pune University in 1989, and PhD. from Duke University in 1994, both in Computer Science. After her Ph.D., she joined the Teletraffic Theory and Performance Analysis department in AT&T Bell Labs as Member, Technical Staff, which later became the Network Design and Performance Analysis department of AT&T Labs. She joined as faculty in the Computer Science and Engineering Dept, IIT Bombay in 2002. During the academic years 2009-2011, she was Visiting Faculty at the Computer Science and Automation Department, Indian Institute of Science, Bangalore. While in Bangalore, she also worked at IBM Research Labs as a part-time Visiting Researcher from June 2009-May 2010. From February 2016 to February 2019, she served as the Head of the Network and Computing Infrastructure department (called "Computer Centre") of IIT Bombay. Her areas of interest are performance analysis of computing systems and networks and building applications for online programming education.



Prof. Varsha Apte





Engage With Us

Join as a Researcher Become a TrustNet Partner Intern at the Trust Lab Be a Student Club Partner Contribute to and/or Use our Resources

Upcoming Events

Outreach Events Business Plan Competition Capture the Flag National Scale Contest Trust Summit 2023

